

Title (en)  
Image processing method and apparatus

Title (de)  
Bildverarbeitungsverfahren und -vorrichtung

Title (fr)  
Procédé et appareil de traitement d'images

Publication  
**EP 0930775 A3 20030226 (EN)**

Application  
**EP 99100730 A 19990115**

Priority  
JP 2040798 A 19980116

Abstract (en)  
[origin: EP0930775A2] A color-to-monochrome image conversion technique is disclosed. After the color image is converted to a monochrome input image and a plurality of primary-color input images, boundary information is extracted from the plurality of primary-color input images. The boundary information discriminates between different colors with the same lightness in the color image. Thereafter, the boundary information is superimposed as a binary image on the monochrome input image to produce the monochrome image. Therefore, a boundary between different colors with the same lightness can be easily imagined and be visibly displayed. <IMAGE>

IPC 1-7  
**H04N 1/40**

IPC 8 full level  
**H04N 1/60** (2006.01); **H04N 1/40** (2006.01); **H04N 1/41** (2006.01); **H04N 1/46** (2006.01)

CPC (source: EP US)  
**H04N 1/40012** (2013.01 - EP US)

Citation (search report)  
• [X] US 4308553 A 19811229 - ROETLING PAUL G  
• [A] EP 0463844 A2 19920102 - CANON KK [JP]  
• [A] US 5045932 A 19910903 - SHARMAN RICHARD A [GB], et al  
• [A] "PRINTING A COLOR IMAGE USING A BLACK AND WHITE PRINTER", IBM TECHNICAL DISCLOSURE BULLETIN, IBM CORP. NEW YORK, US, vol. 31, no. 3, 1 August 1988 (1988-08-01), pages 216 - 229, XP000112859, ISSN: 0018-8689

Cited by  
EP1137257A3; EP1292112A1; NL1018808C2; US7440138B2; US7013043B2; US7095889B2

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**EP 0930775 A2 19990721; EP 0930775 A3 20030226; EP 0930775 B1 20080319**; CA 2259074 A1 19990716; CA 2259074 C 20041102; DE 69938370 D1 20080430; DE 69938370 T2 20080626; JP 3230479 B2 20011119; JP H11205617 A 19990730; US 6370278 B1 20020409

DOCDB simple family (application)  
**EP 99100730 A 19990115**; CA 2259074 A 19990115; DE 69938370 T 19990115; JP 2040798 A 19980116; US 23310299 A 19990119